

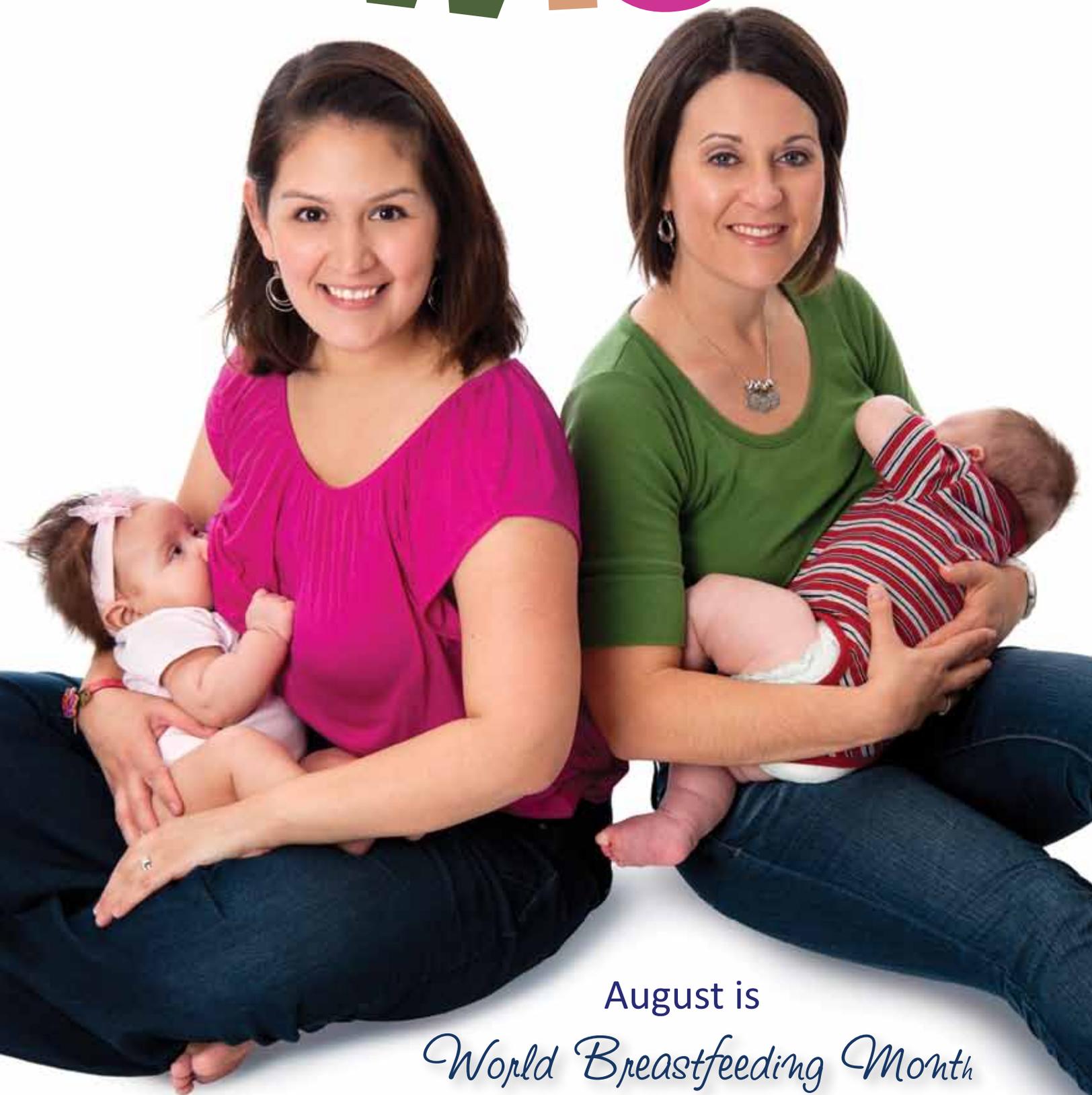
texas

July/August 2012

wic

news

Volume 21, Number 4



August is
World Breastfeeding Month

Reaching Pregnant and Breastfeeding Women

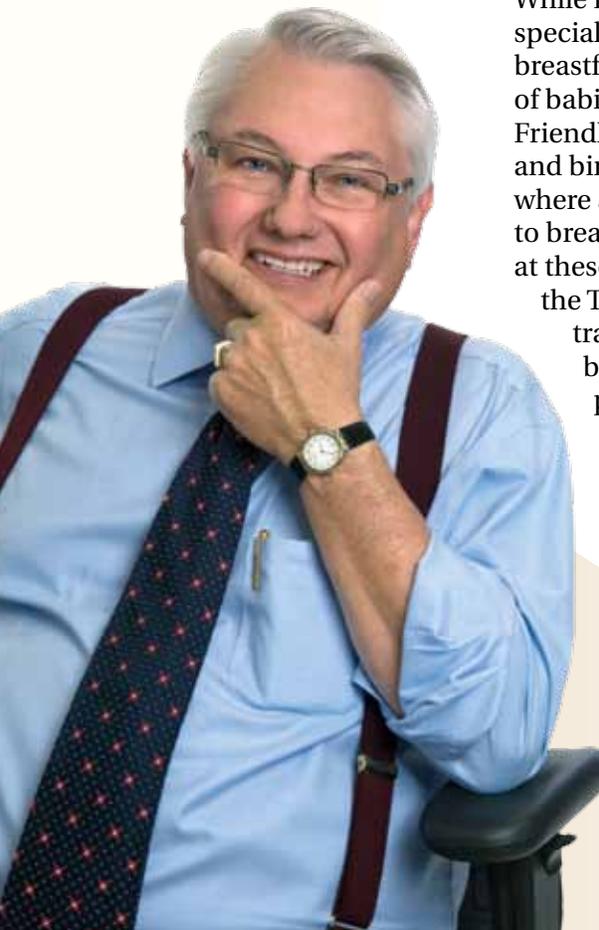
According to the Centers for Disease Control and Prevention, Texas breastfeeding rates have fluctuated over the last few years but the changes are not attributed to any one factor. A woman's decision to start, and continue to breastfeed is affected by many things. During World Breastfeeding Month, Texas WIC staff focus diligently to increase public awareness of breastfeeding and its many benefits for both mothers and babies. This month's issue highlights the great strides that Texas WIC staff is making to reach and support pregnant and breastfeeding women all over the state.

While more hospitals are making special efforts to promote breastfeeding, only about 3 percent of babies in Texas are born in Baby-Friendly facilities. Because hospitals and birthing centers are typically where a mother and baby learn how to breastfeed, support and education at these sites is critical. Read how the Texas Ten Step program is transforming hospital and birthing center policies and practices on page 11.

To help women reach their breastfeeding goals, WIC provides assistance in

and out of the clinic. In October 2012, clinics will assess infant nutritional status using new growth charts and risk codes (page 12). The breastfed baby growth parameters are now considered the new standard, replacing the formula fed infant as standard. In the community, Baby Cafes provide a relaxed setting where mothers, families, and even health care providers can drop in and talk with professionals and peers about breastfeeding and any issues or questions they may have. To read more about these cafés and where they are located, turn to page 16 for "The 4-1-1 on Baby Cafés." For mothers who prefer to get their information on the web, WIC has also established an online presence. Learn about WIC's success in delivering reliable information electronically in "Strengthening Support for Breastfeeding Moms" on page 4 and "Every Ounce Counts" on page 8.

Your hard work and ingenuity empower and inspire the participants we serve. Be proud of the improvements you are making to the health and well-being of Texas by protecting, promoting, and supporting breastfeeding. Keep up the great work!



From the Texas WIC Director
— Mike Montgomery

in this issue



- 2 Reaching Pregnant and Breastfeeding Women
- 4 Strengthening Support for Breastfeeding Moms
- 6 Healthy Texas Babies: Helping Texas Babies Have a Healthy, Happy First Birthday!
- 8 Every Ounce Counts — Attracting Families Electronically
- 10 WIC Dietetic Internship Update: Record 100% Pass Rate for WIC Dietetic Internship Graduates
- Pull Out Section* ▶ 11 WIC Wellness Works
- 11 Breastfeeding Chronicles: Texas Ten Step Program Update — Change Brings Progress!
- 12 New Growth Charts and Risk Codes
- 14 Another Benefit of Breastfeeding: Shaping a Child's Healthy Eating Habits
- 16 The 4-1-1 on Baby Cafés
- 18 RD's Corner: Children's Sleep Patterns Influence Overall Health

NOTICE TO SUBSCRIBERS:

Texas WIC News is available online at <http://www.dshs.state.tx.us/wichd/gi/wicnews.shtm>. If you are a current subscriber who would prefer to receive the Texas WIC News online, send your email address to WICNewsSubscriptions@dshs.state.tx.us and we will notify you by e-mail as soon as an issue becomes available online.

Texas WIC News (USPS 016-975) is published bimonthly by the Department of State Health Services, P.O. Box 149347, Austin, Texas 78714-9347. Subscriptions are free. Periodicals postage paid at Austin, Texas.

POSTMASTER: Send address changes to WICNewsSubscriptions@dshs.state.tx.us or WIC News Subscriptions, Texas WIC News, Texas Department of State Health Services, P.O. Box 149347, Austin, TX 78714-9347.

Mike Montgomery
Texas WIC Director

Linda Brumble
Manager
Nutrition Education / Clinic Services Unit

Patti Fitch
Manager
Clinic Services Branch

Shirley Ellis
Manager
Nutrition Education Branch

Hildreth England, Mandy Seay
Publication Coordinators

Clare Wolf
Managing Editor / Designer

Betty Castle, Joseph de Leon, Renee Mims
Contributing Editors

Chris Coxwell
Photographer

Betty Castle, Irma Rendon,
Lorise Grimbball,
Karina Prado,
Kanokwalee Pusitanun
Contributing Designers

Health and Human Services
Printing Services
Printing

Leticia Silva
Subscriptions



Department of State Health Services
Nutrition Services Section
P.O. Box 149347, Austin, TX 78714-9347
<http://www.dshs.state.tx.us/wichd/default.shtm>.

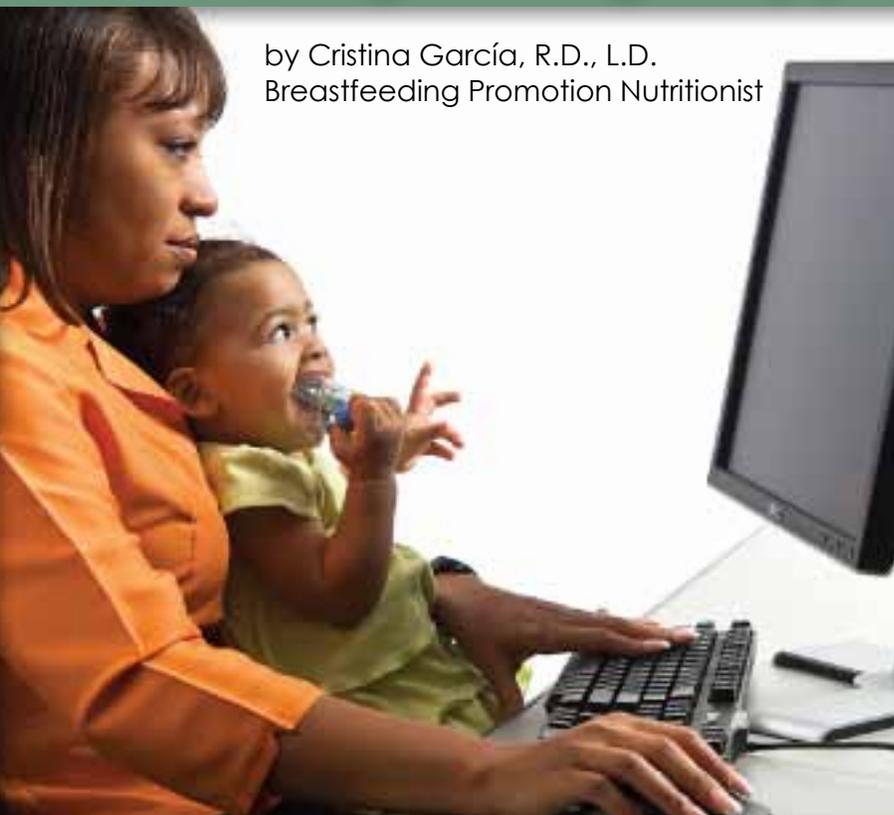
Comments may be sent to the managing editor at Publishing, Promotion, and Media Services, P.O. Box 149347, Austin, TX 78714-9347, or by e-mail to WICNewsEditor@dshs.state.tx.us.

In accordance with federal law and the U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability.

To file a complaint of discrimination, write USDA, Director, Office of Adjudication, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410 or call toll free 1-866-632-9992 (Voice). Individuals who are hearing impaired or have speech disabilities may contact USDA through the Federal Relay Service at 1-800-877-8339; or 1-800-845-6136 (Spanish). USDA is an equal opportunity provider and employer.

Strengthening Support for Breastfeeding

by Cristina García, R.D., L.D.
Breastfeeding Promotion Nutritionist



Utilizing all the markets and technology that moms are already using ensures they will receive the message. The number of people reached can be maximized by posting event announcements in local newspapers and radio stations, doctor's offices, community centers, schools, hospital and clinic waiting rooms, as well as online, through electronic newsletters, blogs, or by text. More importantly, using all methods solidifies WIC's presence as an active member of the local community.

Connecting with Resources

Websites have expanded to include more than information. Many offer a way to create a personalized profile that, with a little information, can send timely e-newsletters, emails, or texts. Websites also offer easy ways to share with social media forums, network with others, and comment on the content of the sites. Many have also created mobile versions of their sites for on-the-go access and easy uploading to personal profiles.

The DSHS-sponsored websites, www.breastmilkcounts.com and www.lechematernacuenta.com, serve as excellent one-stop shops for moms. They offer a wealth of information, interactive learning activities, and serve as resources to locate local breastfeeding assistance. The

Connecting to the community has become a vital part of everyday life. More and more people are turning to the online community for communication, education, support, resources, and to share their experiences. Tapping into the digital world builds on the existing community by quickly connecting users to the information they seek. Texas WIC celebrates World Breastfeeding Month (WBM) with a new theme, *Connecting Communities: Strengthening Support for Breastfeeding Moms*.

Connecting with Moms

Moms, especially new moms, need resources at their fingertips and support systems that are fast, reliable, and always available. By creating a presence in the online community, local WIC agencies can connect breastfeeding mothers to one another where they can share experiences, challenges, successes, and helpful tips.

Who's connected?

Breastmilkcounts.com has had nearly 200,000 visitors since the launch of the site:

- 44% of visitors are iPhone users
- 28% of visitors are Android users
- 17% are iPad users

websites also allow moms to add their personal touch by creating birth announcements, signing up to receive newsletters based on their due date or age of their baby, and posting their stories. Video testimonials add a powerful way for moms to relate to other moms who share similar experiences.

The Breastmilk Counts mobile app, available free at iTunes.com and in the Android app market, allows breastfeeding moms a method of tracking and recording how often they are breastfeeding. Moms can then share the breastfeeding tracking journal via email to their WIC breastfeeding counselors for assessment or for their own personal records. For more information on the mobile app, please see the article “Every Ounce Counts — Attracting Families Electronically” found on page 8.

Connecting with Others

Being connected also provides the opportunity to extend WIC's outreach by delivering information and support to others who may then pass it on through other connective means. For example, there may be a local television news anchor who is expecting and is interested in covering more topics related to pregnancy and breastfeeding. WIC can share educational information and details about upcoming events that could then be aired on the local news, blogs, or other websites.

The key to building a strong network of breastfeeding supporters starts with making as many connections as possible. Assess your local community for opportunities to connect with breastfeeding moms and supporters of breastfeeding using all communication channels available to you. Together, you can build a strong breastfeeding community supporting Texas WIC moms and babies.



Materials Available for Breastfeeding Promotion 2012

In support of this year's World Breastfeeding Month theme, local agencies are encouraged to seek opportunities to connect with their communities. Local agencies will have the opportunity to place orders for WBM photo cards and printed copies of the lesson, CCNE: Benefits of Breastfeeding, which includes two games that can be played at celebration events or health fairs.

Visit the World Breastfeeding Month page from the DSHS website for further information, WBM activity ideas, promotional materials, and more: www.dshs.state.tx.us.



Helping Texas Babies

have a

Healthy, Happy First Birthday!

by Aisling McGuckin, R.N., M.S.N., M.P.H.

MCH Nurse Consultant in the Office of Title V and Family Health



Until now, much of the public outreach and focus has been on the prevention of SIDS and birth defects. We teach women about the importance of folic acid in their diets and exposure to things that can be harmful to a developing baby, such as hot tubs and listeria-containing foods. We teach families about preventing suffocation that results in SIDS. We provide messages about safe sleep:

- babies need to sleep alone
- on their backs
- in a crib without blankets, pillows or other people

We also teach families about the protection breastfeeding offers babies against SIDS.

Less attention has been paid to low birth weight and prematurity. Yet, in Texas 13 percent of babies are born premature and 8.5 percent of babies are too small when they are born, weighing less than 5.5 lbs. But some of the factors that contribute to low birth weight and prematurity are preventable. Healthy Texas Babies is working to get the messages out to WIC staff, doctors, nurses, friends and family of pregnant women, and their partners so they can make the right decisions for their own health and that of their babies.

Texas Department of State Health Services is excited to announce Healthy Texas Babies, a new effort by stakeholders from around the state to reduce infant mortality. Every year in Texas, six babies out of every 1,000 born die before their first birthday. The leading causes of these deaths are birth defects, prematurity and low birth weight, and sudden infant death syndrome (SIDS).

Healthy Texas Babies knows that WIC staff – lactation consultants, dietitians, nutritionists, nurses, and peer counselors – see women every day who could benefit from these messages. WIC staff also have the trust of these families and know the best way to get the message out. This article will outline four central messages of the Healthy Texas Babies initiative in hopes that you will carry these messages to your clients.

Building a Human Being Takes Time

A full-term pregnancy is 40 weeks. But wait – pregnancy is 9 months long, right? Yes, but remember that most months have about 4½ weeks in them, and those weeks add up to 40. Even though a baby can live with medical intervention outside the mother's body as early as 24 to 26 weeks, vital brain, digestive, and immune system development happen in the last 4 weeks of pregnancy. Mothers are uncomfortable in the last weeks of pregnancy and may be anxious to see their new baby, but it's important to tell moms that at least 39 weeks is best for baby and for her own health. Mothers who have their delivery induced, or brought on by administration of medication, are more likely to need a C-section. Unfortunately, C-sections can make recovery for the mom more lengthy, and may make it more difficult to establish breastfeeding. Encourage mom to plan for 39 weeks from the beginning of pregnancy, so she is ready for the last weeks, which can be tough and when she may need more support from family and friends.

Babies Need Fathers Before, During, and After Pregnancy

Research shows mothers experience fewer delivery complications and healthier pregnancies when their partners are involved. Mothers with involved partners are also less likely to smoke and more likely to attend prenatal care, both factors which influence birth weight. Many times, the mother acts like a gatekeeper between a father and his child, since so much depends on the relationship between the partners. What is important to share with mothers is that regardless of whether she is in a romantic relationship with the child's father, supporting the child's father in his efforts to be involved with his child may ultimately improve her health and her child's health. Mothers whose partners are not involved should seek support from someone else – their own mother, friends, or other family members. Many of the women we work with are super women, doing it all on their own. While this is admirable, we also know from research that women with high levels of stress and low social support are more likely to have low birth weight babies and premature labor.

Get Healthy for YOU

Mothers should be healthy enough for pregnancy whether they plan to get pregnant or not. WIC can help by encouraging women to take folic acid, maintain a healthy weight, avoid alcohol, tobacco and substance abuse, maintain good dental hygiene, and get checked and treated for sexually transmitted infections (STI) on a regular basis. Fifty percent of pregnancies are not planned, so chances are good that a woman will be healthy enough for a pregnancy if she has been taking care of herself all along. WIC may also discuss what women would like their reproductive lives to look like. Do they want to have babies in their 20s, 30s? What are their career aspirations? What influences their decision-making? Do they have emotional and financial support in place if they need it? Check out the Healthy Texas Babies website to view videos about preconception and reproductive life planning: www.healthytexasbabies.org.

Get text4baby

Text4baby is a free text messaging service for pregnant women and mothers of babies up to a year old. The messages come twice a week in English and Spanish and are timed to the mother's delivery or the baby's date of birth. The messages are informative as well as supportive, giving mothers gentle reminders about important developmental milestones, linking moms to resources, and encouraging mothers emotionally. Check out the text4baby website so you can share this important free resource with your clients at www.text4baby.org. Moms simply text "BABY" for English or "BEBE" for Spanish to 511411 and then enter some simple information such as zip code and the due date. They can stop at any time and no personal identifying information is collected from the participant. To share with your clients, download the text4baby PSAs from the website so you can play them while your client is at your desk. All this and more can be found at the website, along with free promotional materials you can order for your clinic.

Healthy Texas Babies knows how important WIC staff is to get the word out about this initiative. Encourage your clients to visit the website at www.healthytexasbabies.org to learn about more resources to help them raise healthy, happy Texas babies!

Every Ounce Counts —

Attracting Families Electronically

by Tracy Erickson, B.S., R.D., I.B.C.L.C., R.L.C.
WIC Breastfeeding Coordinator

This Summer marks the third year since the start of the Texas WIC *Every Ounce Counts* campaign and the launch of www.breastmilkcounts.com and its Spanish language counterpart, www.lechematernaacuenta.com. Since the launch of breastmilkcounts.com, there have been nearly 200,000 visitors from all 50 of the United States plus 171 other countries and territories. About 44 percent of the visitors accessed the site using iPhones, 28 percent using Android phones, and 17 percent using iPads.

Breastmilkcounts.com is constantly evolving so it's important that WIC staff continue to refer families to the website to check out what's new. Some of the new features include:

- ❖ Customizable e-newsletters for pregnancy through baby's first year. Moms can sign up or "opt in" to receive the newsletters on breastmilkcounts.com, through email or by text. The mom enters her due date if she's pregnant or her baby's date of birth if her baby has been born and she will receive a series of up to 22 personalized newsletters. Each newsletter has an advertisement which, if hit on, will take them back to breastmilkcounts.com to learn more about breastfeeding or other useful websites such as www.texastenstep.org so they can choose a hospital or www.vaccinesforeveryone.com to learn more about the importance of immunizations.
- ❖ The new Breastmilk Counts App, available in both Android and Apple markets, is a breastfeeding tracker and journal. Moms can record the length of a feeding and which breast the baby fed from, each time they breastfeed. They can then save it to their journal. Additional information found on the app is content from the breastmilkcounts.com mobile site. The app acts as another method to direct moms to the full website, breastmilkcounts.com.
- ❖ A new community section of breastmilkcounts.com includes 10 beautiful testimonial videos of breastfeeding moms. Moms discuss common barriers to breastfeeding and how they overcame them. Families who visit the community page have the ability to share their own advice with other breastfeeding families.



Additional resources include online birth announcements and interactive education activities found in Spanish on lechematernacuenta.com and a revised Working Mom section on both websites. Additional content for dads, twins, and preemies will be added to both websites in the next year.

According to a 2010 Pew Internet Survey, eight in 10 internet users look online for health information, making it the third most popular online activity among all those included in the Pew Internet Project's surveys. (Generations 2010) However, not all health information websites provide accurate and up-to-date information.

It is important to continuously encourage WIC participants to visit breastmilkcounts.com to ensure they are receiving a reliable source of breastfeeding information with links and information to other resources they may need. Push cards and posters are available on the Texas WIC catalog to help local agencies promote breastmilkcounts.com and lechematernacuenta.com to WIC families.

Various online and radio advertisements targeted to different sectors of the population will run in the summer of 2012 to increase awareness and support of breastfeeding.

- ♦ *Every Ounce Counts* online advertisements targeting WIC families will take them directly to breastmilkcounts.com. *Every Ounce Counts* 60-second news spots will also run on radio news stations.
- ♦ Mother-Friendly Worksite online ads targeting employers will take them to texasmotherfriendly.com.
- ♦ Texas Ten Step Program online ads targeting hospital administrators will take them to texastenstep.org.

Numerous mentions of the *Every Ounce Counts* campaign on discussion forums, blogs, and other websites have indicated that the campaign has been well-received.

I almost drove off the road when I heard a radio commercial about the benefits of breastfeeding and how you are legally allowed to breastfeed in public in Texas. Kudos to WIC!

Heard a GREAT radio commercial yesterday advocating breastfeeding! I was so impressed by the information presented in such a short period of time!

I visited the website called www.breastmilkcounts.com. It is a great resource of information for new moms with questions and does a good job at dispelling many of the breastfeeding myths that are out there and reassuring moms that breastfeeding in public is protected in the state of Texas.

The *Every Ounce Counts* campaign seems to have raised awareness of the importance of breastfeeding as WIC breastfeeding initiation rates have gone from 75 percent at the launch of the campaign to 81.8 percent as of February 2012. With the expansion of advertisements to the different sectors of the population and continued support of breastfeeding, we hope to see more families breastfeeding longer and reaching their personal breastfeeding goals.



Reference: Generations 2010. December 16, 2010. Pew Internet Project. Available at: <http://pewinternet.org/Reports/2010/Generations-2010.aspx>

Record 100% Pass Rate for WIC Dietetic Internship Graduates



by Mary Van Eck, M.S., R.D., L.D.
Texas WIC Dietetic Internship Director

Congratulations to the 11 WIC dietetic internship graduates who took the registration examination for dietitians in 2011. For the first time in the history of the Texas WIC Dietetic Internship, we saw a 100% first time pass rate!

The following WIC DI graduates took the exam in 2011 and passed on their first try:

May Aviles – class of 2010 – El Centro Del Barrio WIC, San Antonio

Brittney Adams – class of 2011 – WIC State Office

Rachel Dunn – class of 2011 - Austin/Travis County Health and Human Services WIC

Cassandra Holguin – class of 2011 – City of Dallas WIC

Melissa Gause – class of 2011 - Houston Department of Health and Human Services WIC

Enrique Lira – class of 2011 - Laredo Health Department WIC

Anissa Miller – class of 2011 - Ft. Bend Family Health Center WIC

Corinna Orms – class of 2011 - UT Medical Branch WIC

Meredith Spencer – class of 2011 – Tarrant Co. Public Health Department WIC

Gladys Rodriguez – class of 2011 - UT Health Science Center at Houston WIC

Meagan Williams – class of 2011 – Corpus Christi Health District WIC

Of the Texas WIC Dietetic Internship graduates from the past 13 years, approximately 75 percent are still working for Texas WIC in one capacity or another, and about 50 percent of them are in a WIC management or supervisory position. Over 90 percent of all graduates are now RDs, working in a variety of capacities such as hospital, government, and teaching. A recent survey of alumni indicates that over 95 percent view their experience in the Texas WIC dietetic internship as extremely, or very, positive and would recommend it to others as a great internship. The respondents also gave it high marks for clinical preparation and for training them for counseling WIC and other cli-

ents. Remarks from respondents included many similar to these:

“The Texas WIC Dietetic Internship was the best experience I have had in my nutrition career. The training and education provided before each rotation set us up to succeed. The entire experience surpassed my greatest expectations.”

“The WIC dietetic internship helped prepare me for medical school, with all of the rotations and binders/work we had to complete.”

“I’m currently serving as a preceptor for several different internships, I feel that the WIC internship is at the same level if not higher than university/institutional internships. The assignments WIC interns must complete seem more relevant and challenging.”

The Texas WIC Dietetic Internship is open to current Texas WIC employees. It is an Accreditation Council for Education in Nutrition and Dietetics (ACEND) accredited dietetic internship. Interns complete rotations in food service management, medical nutrition therapy, community nutrition, and conduct a nutrition education planning and intervention project during the 8 month rotation. Prior to the start of each rotation, the interns attend didactic seminars and workshops to prepare them for the rotations. Following successful completion of the program, they are eligible to take the Registration Examination for Dietitians.

As we prepare for the ACEND accreditation process in 2012-2013, RD exam first-time pass rate is a very important component of the accreditation process.

We hope to continue this great tradition of 100% pass rate in the years to come!

Read more about the Texas WIC Dietetic Internship at <http://www.dshs.state.tx.us/wichd/interns/intern-brochure.shtm>

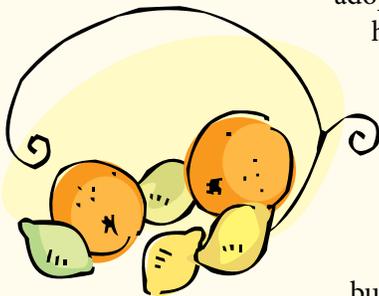
Make your Mondays Meatless

CONTRIBUTED BY SARAH WHIPKEY,
TEXAS STATE DIETETIC INTERN

Want an easy way to improve your health and increase your collection of delicious recipes? Join the ever-growing movement and implement Meatless Mondays!

More and more research comes out each year promoting the benefits of a diet rich in fruits, vegetables, and whole grains.

This does not mean that everyone needs to adopt a fully vegetarian diet. It does, however, suggest that the average American should increase their intake of plant-based foods. A great way to start is by making one day of the week, in this case Monday, completely meatless.

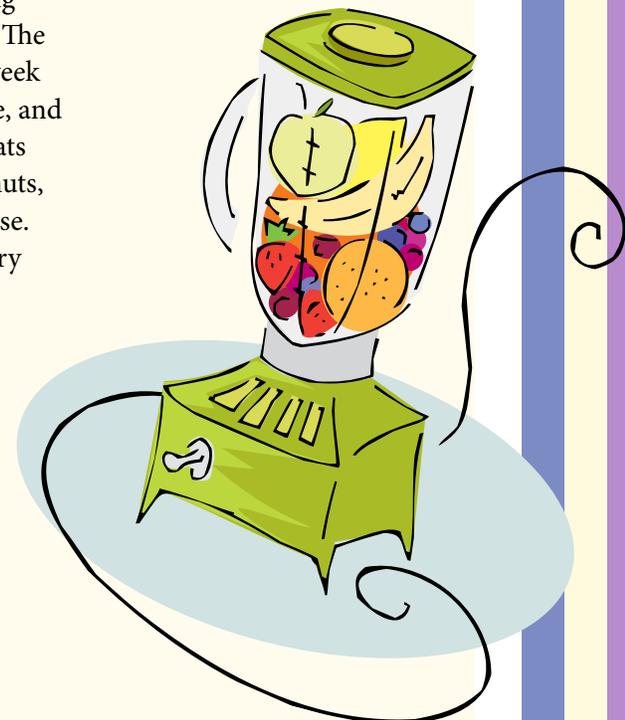
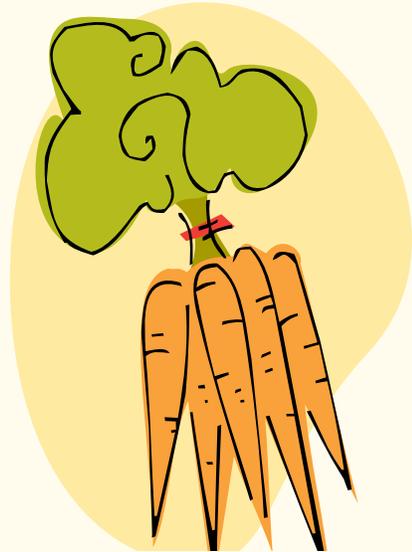


One day a week may not seem like much, but it can make a huge difference. According to Meatless Monday, a non-profit initiative of The Monday Campaigns, going meatless just once a week can reduce your risk of chronic diseases such as cancer, heart disease, and diabetes. Studies have shown that replacing foods rich in saturated fats (meat and dairy products) with foods rich in polyunsaturated fats (nuts, seeds, and vegetable oils) significantly reduces the risk of heart disease. Diets rich in plant foods also improve insulin resistance, which is very beneficial for people with type 2 diabetics.

Why do this on Monday?

For most of us, our week starts on Monday. We set our goals and plan our schedules accordingly. Research even suggests that we are more likely to maintain behavior changes we make on Mondays. So start your week right, and make it your goal to try new fruits, vegetables, and whole grains.

(continued on WIC Wellness Works - Insert B)



Make Your Mondays Meatless

(continued from WIC Wellness Works - Insert A)



What is so Special about Plant Foods?

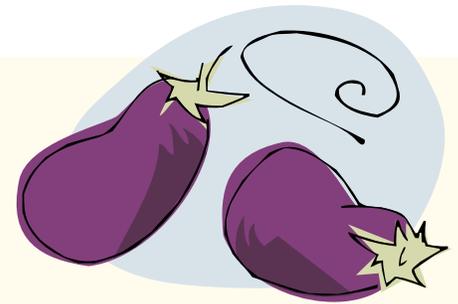
Vegetables, fruits, and whole grains are generally low-calorie, low-fat foods that are rich in vitamins, minerals,

antioxidants, and fiber. The

variety and amount of vitamins and minerals in different plant foods cannot be beat! Vitamin C, found in kiwi, citrus fruit, bell peppers, broccoli, and more, boosts your immune system, helps heal bruises, and keeps your gums healthy. Vitamin E is protective against prostate cancer and Alzheimer's disease and is found in foods such as seeds, nuts, and dark leafy greens. The mineral magnesium is essential for strong, healthy bones and blood circulation and is found in seeds, spinach, Swiss chard, and beans. These are just a sampling of the many vitamins and minerals found in plant foods.

Antioxidants are substances that protect our cells from free radical damage. Free radicals may play a role in the development of some cancers and other diseases. Vegetables, fruits, and whole grains are abundant sources of antioxidants.

The average American woman should be consuming 25g of dietary fiber every day; the average American man should consume 38g. Unfortunately, most people fall short of this recommendation and instead consume about 15g of dietary fiber per day. Dietary fiber is found only in plant foods.



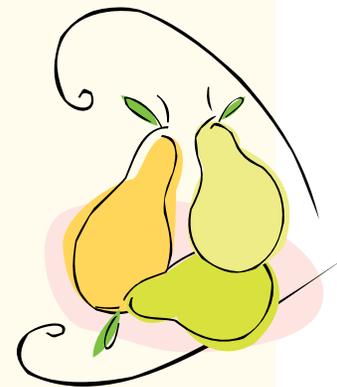
Excellent food sources of fiber include

lentils, pinto beans, kidney beans, whole grains, raspberries, pears, artichokes, and broccoli.

Worried about Protein?

Don't be! Protein deficiency is extremely rare in the United States. In fact, the majority of Americans (including full-fledged vegetarians) consume more than the recommended amount of protein each day. On average, a woman only needs about 5 ounces of protein per day; a man only needs about 6 ounces per day. Those of us who are extremely physically active can consume a little more, but massive amounts of protein are just not necessary. So what does 5 to 6 ounces of protein look like? One cup of beans and a half cup of brown rice would meet the entire day's protein recommendations!

Another protein issue that concerns some individuals is the type of amino acids in particular foods. Animal proteins are referred to as complete proteins because they contain all essential amino acids we require. Plant foods containing varying amino acids are referred to as incomplete proteins. However, as long as you eat a variety of beans, legumes, nuts, seeds, grains, and vegetables, you will consume adequate amounts of all essential amino acids. Soybeans and a delicious whole grain called quinoa, do contain all essential amino acids and are considered complete proteins.



Try it Out Next Monday!

Reducing your consumption of animal proteins and increasing the amount of plant foods can have many beneficial effects on your health. A diet heavy in vegetables, whole grains, and fruits is good for your heart and can be protective against various chronic diseases. An added benefit is that plant-heavy diets are good for the environment too! Less resources are needed to grow and harvest plants than to feed and water livestock. In fact, it is estimated that U.S. cattle consume more than seven times the amount of grains than the entire U.S. population!

So go ahead and try some plant-only dishes. Be creative in the kitchen and you might just find a new favorite recipe!

Resources:

- The Monday Campaigns, Inc. Meatless Monday Website. Available at: <http://www.meatlessmonday.com>.
- Cross A.J., M.F. Leitzmann, M.H. Gail, A.R. Hollenbeck, A. Schatzkin, et al. 2007. A Prospective Study of Red and Processed Meat Intake in Relation to Cancer Risk. *PLoS Med.* 4(12):1973-1984.
- U.S. Department of Agriculture. Protein Foods. Choose My Plate Website. Available at: <http://www.choosemyplate.gov>.
- U.S. Department of Agriculture. 2009. Agricultural statistics. Washington, DC: U.S. Department of Agriculture.

recipe

Lentil Stuffed Bell Peppers

(Prep: 15 minutes; Total: 1 hours)

- ⅔ cup red lentil
- 4 tablespoons vegetable oil
- 4 green bell peppers
- 1 teaspoon cumin seed
- 2 onions (chopped)
- 2 green chilies
- 1 piece gingerroot (grated 1 inch)
- 1 tablespoon ground coriander
- 1 ¼ cups water
- Salt and pepper to taste
- 2 tablespoons chopped cilantro

Rinse lentils and soak for 30 minutes. Heat half oil in skillet and add peppers; cook for 3 to 5 minutes until golden brown. Drain and cool

then add remaining oil to pan. Cook cumin seeds till they begin to pop. Add onions and chilies; cook for 8 minutes. Stir in ginger and coriander. Drain lentils and add to the pan with water. Stir and cover then cook for 15 to 20 minutes until the liquid has evaporated. Stir in salt and pepper and add cilantro. Cut tops off peppers and remove seeds. Stuff with the lentils and replace the tops then stand in a baking dish. Bake at 350 F for 15 minutes. Yield: 4 servings.

Calories 301; Fat 14g; Protein 11g; Carb35g; Fiber 15g; Iron 4mg; Calc 75mg



WIC WELLNESSWORKS

Shape up Your Lifestyle

CONTRIBUTED BY ROSANA ARRUDA, R.D., L.D
NUTRITION CONSULTANT AND WELLNESS
COORDINATOR FOR LA 26

WIC staff at local agency 26 had the opportunity to attend the “Shape up Your Lifestyle” event in commemoration of the National Nutrition Month and Annual Wellness Day. The main goals expected for staff participation were the following:

- Understand the risks and causes of cardiovascular disease.
- Explore the benefits of a healthy lifestyle.
- Participate in a 45-60 minute workout.
- Explore innovative ways for healthy eating in the workplace.

The event was held at the City of Houston Parks and Recreation Department Fonde Fitness Center. As part of the program activities, staff attended a wellness seminar and performed biometric screening sponsored by Cigna Health Care. The biometric screening included blood pressure, weight, body fat, and body mass index. The third activity consisted of a one hour fitness class of the staff’s choice: Zumba, Body Blast circuit training, or a low-impact chair exercise class. The closing event consisted of food demonstrations and samplings led by the Greater Houston Food Bank and My Fit Foods and Tru Meals, two restaurants who sell healthy, pre-portioned and ready-to-go meals.

Local agency dietitian and wellness coordinator Rosana Arruda said, “We had overwhelmingly

positive feed-back from the staff.

They enjoyed attending the Wellness Seminar and ‘knowing their numbers’ through the biometric screening. It was amazing to watch their enthusiasm while they took part in these fitness classes. Even

employees who normally refrain from taking part in any wellness or physical activity throughout the year have enjoyed taking part. Many employees gained more confidence in their fitness potential.”

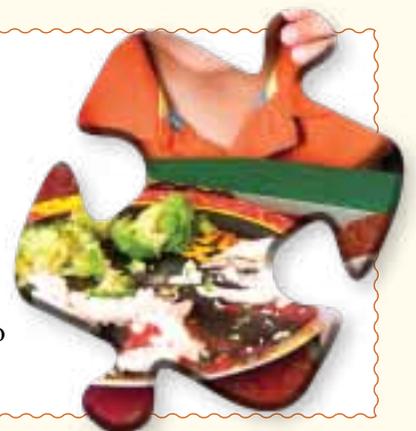
The “Shape up Your Lifestyle” was an innovative and successful wellness event, as it gave the staff the opportunity to learn and have fun at the same time. WIC staff were thrilled and very inspired from attending this event and being able to participate in a full workout activity. “I am glad to say that it was worth every minute spent in the planning, preparation, and coordination of this event,” said Rosana.

Share your wellness success stories for the opportunity to be spotlighted in Texas WIC News. Contact Erin Thornberry at erin.thornberry@dshs.state.tx.us or 512-341-4580.



Mind Games

Exercising your brain is just as important as a physical workout for your body. Keep your mind sharp and build memory skills by solving puzzles, reading, listening to music, or meditating. Whether you’re trying to remember a new name or a simple task, healthy brain function and a good memory are essential. Give your brain a mental workout and try this picture puzzle! Study the puzzle piece for 5 seconds, then as you read through this issue of *Texas WIC News* try to spot the full picture that the puzzle piece came from.



Texas Ten Step Program Update — Change Brings Progress!

by Veronica Hendrix, L.V.N., I.B.C.L.C., R.L.C.
Texas Ten Step Program Coordinator

A Cochrane review (Fairbank, et al, 2000) released in 2000 found that institutional changes in maternity care practices effectively increased breastfeeding initiation and duration rates. These changes can be part of a comprehensive set of changes, such as those implemented in pursuit of the World Health Organization (WHO)/United Nations Children's Fund (UNICEF) Baby Friendly designation. Or, they can be individual interventions such as increasing the rooming-in of mothers and babies or discontinuing policies that are not evidence based (e.g. unnecessary separation of infant from mother).

Texas Ten Step designation is awarded to hospitals and birthing centers that address 85 percent of the WHO/UNICEF *Ten Steps to Successful Breastfeeding*. It is a supportive program designed to assist the facility in policy development, staff education, facility promotion, and continued progress toward full implementation of the Ten Steps, or Baby Friendly designation. There are currently six Baby Friendly hospitals and 80 Texas Ten Step designated facilities, up from 65 last year.

The past year brought several changes to the Texas Ten Step (TTS) program:

1. New points were added to the TTS Score Card Evaluation Tool based on the Baby-Friendly Hospital Initiative document, *The Guidelines and Evaluation Criteria for 2011*. A score of 85 or greater is required for TTS designation and evaluation points are now awarded for:

- Providing education to mothers of formula feeding infants, including safe handling, storage and preparation of formula, paced feeding and newborn stomach capacity. This encourages TTS facilities to focus on the health of all newborns regardless of feeding method.
 - Breastfeeding education of physicians through the Department of State Health Services (DSHS) or other trainings.
2. The texasstep.org website was expanded to include several new features.
- Icons were added to the TTS listing to designate Baby Friendly facilities and facilities that have started the Baby Friendly designation process.
 - A newly created section for health-care professionals with various links to online resources and downloadable materials, such as:
 - ♦ Scripts that provide health-care providers with recommended responses when counseling moms who want to stop breastfeeding or ask for formula.
 - ♦ *The Breastfeeding Support Contract for Nurses*, which facility administrators can use to show staff their commitment to breastfeeding.

The Department of State Health Services is planning to launch the Texas Ten Step Star Achiever Program next year. The Star Achiever Program will be a collaborative quality improvement program in which DSHS staff and quality improvement profession-



New TTS member poster with images from UTMB, Austin Women's Hospital, winner of TTS World Breast Feeding Month.

als will provide training and technical assistance to help facilities move toward full adoption of the Ten Steps.

Improving health outcomes for breastfeeding mothers and infants remains a priority for the Texas Ten Step program. The Department of State Health Services is committed to growth and evaluation of the program, creating valuable resources for health-care providers, and building the relationship between facilities and WIC local agencies. Input from designated facilities is valued and welcomed by the Texas Ten Step coordinator in order to better understand the unique needs of a facility and its community. If you are interested in program information, or would like to assist a facility in your area in earning this designation, contact Veronica Hendrix, program coordinator at Veronica.Hendrix@dshs.state.tx.us

References

- Fairbank L, O'Meara S, Renfrew MJ, Woolridge M, Snowden AJ, Lister-Sharp D. A systematic review to evaluate the effectiveness of interventions to promote the initiation of breastfeeding. *Health Technology Assessment* 2000;4(25):1–171.
- The Guidelines and Evaluation Criteria for 2011 http://www.babyfriendlyusa.org/eng/docs/2010_Guidelines_Criteria_Rev%2011_28_11.pdf



New Growth Charts and Risk Codes

by Tiffany Brown, R.D., L.D.
Training Specialist

Why is WIC implementing the World Health Organization (WHO) growth charts?

The physical growth of infants and children has long been recognized as an important indicator of health and wellness. Growth charts are used to assess whether a child is receiving adequate nutrition and to screen for possible inadequate growth which could indicate adverse health conditions. In October 2012, WIC will implement the WHO growth charts as well as revised nutrition risk criteria. Below is a summary of the rationale behind these changes.

In 2000, the Centers for Disease Control and Prevention (CDC) published a set of growth charts that are currently used by WIC. In Texas, these charts (which will be referred to as the CDC charts) are used to monitor the growth of children from birth to less than 2 years of age. Although the charts have been recommended and used internationally for decades, limitations of their use have been well documented. The data used to construct the charts was derived from one study of children in the United States and therefore lack racial diversity. The children were predominantly formula-fed term infants with birth weights greater than or equal to 2500 grams. Another concern about the CDC charts is the insufficient collection of anthropometric data during the first several months of life which

resulted in growth curves that do not adequately represent early childhood growth. The CDC charts are a growth *reference*, not a standard, which describes how certain children grew in one country from 1963 to 1994.

In 2010, the CDC recommended the use of the WHO international growth charts for infants and children less than 24 months of age. The decision was based on several factors, including the recognition that breastfeeding is the recommended standard for infant feeding. The WHO charts are a growth *standard*, not a reference, meaning that the healthy breastfed infant is intended to be the standard against which all other infants are compared.

The data for the WHO chart were derived from children studied in six different countries: Brazil, Ghana, India, Norway, Oman, and the United States. These children lived in socioeconomic conditions that favored growth. Environmental constraints to growth such as poor diets and infections were minimal. In addition, the mothers followed healthy practices such as exclusively or predominantly breastfeeding and refrained from smoking during and after pregnancy. Anthropometric data was collected at birth, 1 week, and every 2 weeks for the first 2 months after birth. Measurements were then collected monthly through age 12 months and then bimonthly from age 14 to 24 months.

Therefore, the WHO growth curves reflect the rapid and changing rates of growth, especially during early infancy.

Since it is recognized that children all over the world grow similarly when their health and nutrition care needs are met, the WHO standards can be used to assess children globally regardless of ethnicity, socioeconomic status, and type of feeding. The WHO charts are growth standards that indicate how infants and children should grow under optimal nutritional and environmental conditions. Although *standards* and *references* may both serve as a basis for comparing growth, each facilitates a different interpretation. A *standard* defines how children should grow and therefore deviations from the pattern indicate abnormal growth. A *reference* does not provide as reliable a basis for such benchmarks, although in practice, references are often mistakenly used as standards.

Why are some risk criteria and definitions changing in WIC?

In June of 2010, the National Center for Health Statistics (NCHS) published: *Changes in Terminology for Childhood Overweight and Obesity*. As the title implies, the terminology to categorize a child's weight status has changed and impacted the definitions and/or titles of various infant and child anthropometric risk criteria that WIC uses. The term, "obese" will now be incorporated into the risk criteria since it more effectively conveys the seriousness, urgency, and medical nature of the concern for our overweight children. In Texas, these changes will affect six of the existing anthropometric risk criteria. In addition, two new criteria have been added and all changes will be implemented as of October 1, 2012. A brief summary of the risk code changes are outlined below:

103 Underweight (Infants and Children) – Revised Risk Code

The cut-off value for birth to less than 24 months will now be defined as less than or equal to the 2.3rd percentile weight-for-length. The cut-off value for children 2 to 5 years of age has not changed.

104 At Risk of Underweight (Infants and Children) – Revised Risk Code

This risk criterion was previously titled, "At Risk

of Becoming Underweight (Infants and Children)." The cut-off value for birth to less than 24 months will now be defined as greater than the 2.3rd percentile and less than or equal to the 5th percentile weight-for-length. The cut-off value for children 2 to 5 years of age has not changed.

112 At Risk of Overweight (Infants and Children) – New Risk Code

This risk criterion was previously included in risk code 114, "At Risk of *Becoming* Overweight (Infants and Children)." The cut-off values based on parental obesity have not changed and they are no longer *optional* to assess.

113 Obese (Children 2 – 5 Years of Age) – Revised Risk Code

This risk criterion was previously titled, "Overweight (Children 2 – 5 Years)." The cut-off value has not changed.

114 Overweight (Children 2 – 5 Years of Age) – Revised Risk Code

This risk criterion was previously titled, "At Risk of Becoming Overweight (Infants and Children)." The cut-off value has not changed.

115 High Weight-for-Length (Infants and Children less than 24 Months of Age) – New Risk Code

Previously, there was no criterion for this age group to classify an infant or a child experiencing excessive weight-for-length. The cut-off value for birth to less than 24 months is defined as greater than or equal to the 97.7th percentile weight-for-length.

121 Short Stature (Infants and Children) – Revised Risk Code

The cut-off value for birth to less than 24 months will now be defined as less than or equal to the 2.3rd percentile length-for-age. The cut-off value for children 2 to 5 years of age has not changed.

122 At Risk of Short Stature (Infants and Children) – Revised Risk Code

The cut-off value for birth to less than 24 months will be defined as less than or equal to the 2.3rd percentile length-for-age. The cut-off value for children 2 to 5 years of age has not changed.

(continued on page 14)

(continued from page 13)

In Summary

The WHO charts were based on the premise that the healthy breastfed infant is the standard against which all other infants should be compared. Furthermore, by adopting the WHO growth standards, WIC will now have more than just a small reference population to compare children to. The standards also link physical growth to motor development which highlights the importance of looking at child development comprehensively. The WHO growth standards provide a solid instrument to help assess that children are growing and developing in the same optimal manner as healthy breastfed infants.

The U.S. Department of Agriculture (USDA) periodically reviews nutrition risk criteria for WIC. Comments for revisions to the risk criteria are based on recommendations from professional organizations such as the American Academy of Pediatrics (AAP) and/or research from federal agencies such as the CDC. As a result, the final revisions impact the way WIC conducts nutrition assessments as well as strategies for counseling clients and assigning appropriate food packages.

References:

- Centers for Disease Control and Prevention. Use of World Health Organization and CDC Growth Charts for Children Aged 0 – 59 months in the United States. *MMWR* 2010; 59 (No. RR-9). Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5909a1.html/rr5909a1.htm>
- World Health Organization. WHO Child Growth Standards: Length/Height-for-Age, Weight-for-Age, Weight-for-Height and Body Mass Index-for-Age: Methods and development. Geneva, Switzerland: World Health Organization; 2006.
- Mercedes de Onis, Amani Siyam, Elaine Borghi, Adelheid W. Onyango, Ellen Piwoz and Cutberto Garza. Comparison of the World Health Organization Growth Velocity Standards with Existing US Reference Data. *Pediatrics*. 2011. Available at: <http://pediatrics.aappublications.org/content/128/1/e18.full.html>.
- Ogden CL, Flegal KM. Changes in Terminology for Childhood Overweight and Obesity. *National Health Statistics Reports*; no. 25. Hyattsville (MD): National Center for Health Statistics. 2010.

Another Benefit of Breastfeeding:

Shaping a Child's Healthy



With the rise of childhood obesity and related health concerns, more people are trying to find creative ways to get children to eat a variety of nutritious foods. Many parents and caregivers find it difficult to encourage healthy eating; often saying their child doesn't like the taste or appearance of fruits and vegetables. They might resort to tricks

for hiding vegetables or fruits in their child's favorite meals. But this technique sometimes fails, because as we know, even a toddler has an eye keen enough to identify pureed spinach in their macaroni and cheese.

It's time to get back to basics and understand how children learn to like certain foods so that parents and caregivers can set their child up for success. By building healthy eating habits early on, it is possible to increase the likelihood that the child will learn to like a variety of foods later in life, including fruits and vegetables. The foundation for food preferences is actually built before the child ever tastes his first bite of solid food. In particular, the mother's diet during pregnancy and lactation plays a crucial role. Research indicates an infant may be exposed to flavors as early as the prenatal period. Both the prenatal and breastfeeding periods are important for shaping the kinds of foods that a child learns to prefer (Beauchamp & Mennella 2009).

Breastfeeding can positively influence what kinds of foods a child will accept later in life. It's all related to the flavors and odors that infants experience in mother's milk. Like the age-old saying "you are what you eat," mother's milk can take on certain tastes and smells, allowing the breastfed infant to have a unique experience at each feeding. If a breastfeeding mother regularly eats fruits and vegetables, her infant may grow up to eat more fruits and vegetables and be less of a picky eater. Early exposures prime children's taste buds to learn that food is familiar, so as they get older they may accept that food more readily.

A study by Forestall and Mennella (Forestall & Mennella 2007) looked at the acceptance of fruits in breastfed and formula fed infants. The breastfed group was more accepting of peaches than the formula fed group. Another study (Mennella, Jagnow & Beauchamp 2001) found similar results when looking at vegetable acceptance. It was determined that a

mother's intake of carrot juice during pregnancy and/or lactation influenced how the infant reacted when carrots were introduced. The breastfed infants whose mothers drank carrot juice regularly during pregnancy or lactation were more accepting. In addition to molding food preferences, the flavors in breastmilk also positively influence an infant's nursing behavior. Infants enjoy the variety of flavors in breastmilk, and a study showed that infants nursed longer after their mother ingested strong compounds like garlic (Mennella & Beauchamp 1993).

So by encouraging a breastfeeding woman to eat a variety of foods, including fruits and vegetables regularly, you are not only helping her to become healthy, but also creating an impact on the breastfed infant's future dietary habits. Another reason why breast is best.

References:

- Beauchamp, G.K. & J.A. Mennella. 2009. Early flavor learning and its impact on later feeding behavior. *J Pediatr Gastroenterol Nutr.* 48;S25-S30.
- Forestall, C.A. & J.A. Mennella. 2007. Early determinants of fruit and vegetable acceptance. *Pediatrics.* 120;1247-1254.
- Mennella, J.A., C.P. Jagnow, & G.K. Beauchamp. 2001. Prenatal and postnatal flavor learning by human infants. *Pediatrics.* 107;e88.
- Mennella, J.A. & G.K. Beauchamp. 1993. The effects of repeated exposure to garlic-flavored milk on the nursing's behavior. *Pediatr Res.* 34(6);805-808.





The 4-1-1 on Baby Cafés

by Lindsey Randall, I.B.C.L.C., R.L.C.
Breast Pump Coordinator/
Breastfeeding Promotion Nutritionist
& Juliana Baird,
University of Texas Dietetic Intern

What is a Baby Café?

A Baby Café is recognized by *The Baby Café Charity* as a drop-in center that provides a place for breastfeeding women and their families to congregate and receive advice or other services supportive of breastfeeding from other moms and trained staff.

Who are they for?

The beauty of Baby Cafés is that they are for everyone! Each café serves as a breastfeeding resource for the community by recognizing breastfeeding as the normal way to feed and care for babies. All pregnant and breastfeeding women, their partners, older children, or any of their supporters are welcome to drop-by without an appointment.

In addition, health care providers or anyone interested in learning more about breastfeeding or how to support it can utilize the Baby Café services.

There is no charge to visit the Baby Café drop-in center.

Where are they located?

Baby Cafés are located world-wide, but there are 12 current locations within the United States. Of those 12, six are located in Texas.

Commonly, Baby Cafés are located within health and community centers, churches, or other shared spaces. One of the newest locations in Texas, the Community Baby Café, is co-located with a City of Dallas WIC clinic.

When are they open?

The hours of each Baby Café differ from site to site. Hours of operation are typically flexible and are set up to meet the need of the local community. To meet the Baby Café model, it is required that each location be open at least once a week. However, many locations are open more than that.

What can visitors expect?

Visitors can expect a relaxed, safe, family-friendly, environment that provides information about all areas of breastfeeding in a non-clinical style. Visitors have the opportunity to talk with peers and professionals from all areas of the lactation world.

How is WIC involved?

Texas WIC traditionally employs staff that contribute to the breastfeeding support at several of the Texas Baby Cafes, but in December of

2011, the Texas WIC program progressed from a supportive role to a managerial role with the opening of the Community Baby Café in Dallas. The Community Baby Café is one of the first in Texas to be managed, staffed, and funded solely by the WIC program, and will serve as a pilot program for Texas WIC.

What do visitors say?

“After moving from Africa to America, there were many challenges that surrounded the birth of our baby, Abigail. We discovered that Abigail could not coordinate the tasks of swallowing, breathing, and sucking, all at the same time. The doctor told us she had to be off the breast and fed with a slow flow bottle nipple. A thickener was added to the breastmilk and we nearly decided to settle for formula.

“Thankfully, God directed us to the WIC Program where we found immediate help and relief through the Community Baby Café. The warm welcome to the premises and the reception turned our low hearts into rejoicing ones! The counseling, support, and access to an electric breast pump encouraged us to stick to our premier choice, breastmilk.

“Today, we really see how beneficial breastmilk is to babies, especially when we see the current health of our little Abigail. We see with enthusiasm the difference breastmilk brings to our home. Thank you WIC! Thank you Community Café!” ~ KOSSI, AKOSSIWA, & ABIGAIL.

How to become a Baby Café?

All applicants must be willing to be part of the national initiative and able to implement the Baby Café standards of care. Once approved, a license certificate must be displayed within the location as proof of registration with the Baby Café network.

At start-up, there is a £200 international registration fee or approximately \$320.00, which is followed by an annual fee of £75.00 or approximately \$130.00. This provides continued licensure and availability to a variety of resources. The operational costs depend on factors such as the location, number of employees, em-

ployee qualifications, etc. Funding for a Baby Café may come from various sources including community partners or healthcare organizations, such as WIC.

Want to learn more?

For more information on Baby Cafés please visit, <http://www.thebabycafe.org/>.



Texas Baby Café Locations:

- The Community Baby Café, Dallas City of Dallas WIC Site, 8202 Spring Valley Road, Suite 100, Dallas, Texas (Dallas County), 75240, 1-214-243-2104, Monday through Friday (8:30 a.m. to 5:00 p.m.)
- Del Sol Medical Center Baby Café, El Paso Del Sol Medical Center, 10301 Gateway West Blvd, El Paso, 79925, 1-915-594-5959, Mondays (10-12 a.m.)
- El Paso Baby Café, El Paso El Paso Baby Café, Texas Tech Gayle Greve Hunt School of Nursing, 415 E. Yandell Drive, El Paso, Texas, 79902, 1-915-545-6455, Tuesdays and Thursdays (1:30-3:30 p.m.) Mondays and Wednesdays (8.30-11.00 a.m.)
- Hidalgo County WIC Baby Café, North San Juan Community Resource Center, 509 East Earling Road, San Juan, Hidalgo, 78589, 1-956-907-4943, Mondays and Wednesdays (2-4 p.m.)
- Las Palmas Medical Center Baby Café, El Paso Las Palmas Women and Teen Centers, 9201 Dyer St., Ste. E, El Paso, Texas, 79904, 1-915-757-2294, Wednesdays (11 a.m. to 1 p.m.)
- Odessa Medical Center Baby Café, Odessa Medical Center Hospital Center for Women and Infants, 500 West 4th Street, Odessa, TX, 79761, 1-432-413-3249, Wednesdays (10 a.m. to 12 noon)



Children's Sleep Patterns Influence Overall Health

by Roxanne Robison, R.D., L.D.
CSHCN Nutrition Consultant

Based on current sleep research, it may be as important to ask about a child's sleeping patterns as it is to ask about their diet when doing a nutritional assessment. As dietitians, why should we be concerned with children's sleeping habits? Because sleep — excessive amounts or too little — can affect weight gain, nutrition, and overall health. Many infants and young children have erratic sleep schedules based on the parents' sleep habits. Much of what we know about the importance of sleep has been with sleep deprivation studies in adults and rats — not in infants and young children. But the fact that infants and young children spend more of their life asleep than awake, indicates that it is important for normal development. Studies in adults have shown that sleep plays a role in growth and healing of body tissues, learning and memory processing, proper functioning of the immune system as well as proper cognitive, behavioral, and emotional functioning.

This article will review normal sleep patterns of infants and young children and review current research in the areas of sleep, weight gain, and growth.

What is a normal amount of sleep?

According to the National Sleep Foundation, newborn infants sleep anywhere from 15 to 18 hours a day, but do so only in short bursts of 2 to 3 hours. Newborn infants wake frequently

to feed due to their small stomach capacity. At this age, an infant doesn't have an established sleep pattern and their body doesn't yet know the difference between night and day. As many parents report, "they have their days and nights mixed up." It takes a while for a baby to establish a circadian rhythm, which is based on daylight, darkness, hormone release, and the fall and rise of body temperature.

By about 6 weeks of age, babies begin to sleep up to 4 hours at a time and sleep more at night as their day-night confusion ends. Parents need to help their children learn that day time is for wake and night for sleep. If a regular schedule is not maintained, the child's sleep pattern may become erratic. According to Michael J. Harnish, PhD, clinical director of the Oklahoma Center for Children's Sleep Disorders, "Parents are often the problem because they don't set limits and then get frustrated when the child doesn't want to sleep when they want them to."

By 8 weeks, babies start to sleep through the night, which in baby terms, means about 5 hours without waking. Table 1 describes typical sleep patterns of infants and young children.

The link between too little sleep and obesity

According to a report by the Institute of Medicine, evidence suggests there has been a decrease in sleep duration across infancy,

AGE	Total hours of sleep a day	Typical sleep pattern
Newborn	15 – 18	In 2 to 4 hour increments
1 – 4 weeks	15 – 16	Random sleep pattern
1 – 4 months	14 – 15	Longest stretch is 4 to 6 hours
4 – 12 months	14 – 15	6 to 8 hour stretch with 3 naps a day; 2 a day by 6 months
1 – 3 years	12 – 14	By 18 months to 2 years of age, stops napping in the morning
3 – 6 years	10 – 12	To bed by 7 to 9 pm; up by 6 to 8 am; by 5 yrs, no longer naps

Table 1

childhood, and adolescence over the last 20 years, with the most pronounced decreases among children under 3 years of age. Mounting evidence is indicating that not getting enough sleep is a risk factor for obesity among all age groups, including infants and children under the age of 5. People who get less sleep than they need have been shown to produce less of the hormone, leptin, which is an appetite-suppressing hormone. At the same time, they produce more ghrelin, an appetite-stimulating hormone, and can end up eating more as a result.

The relationship between sleep and growth

In May 2011, a study published in the journal, *SLEEP*, demonstrated that increased bursts of sleep beyond the norm for a child is typically followed by a growth spurt in body length, typically within 48 hours of the recorded extra sleep. Dr Michelle Lampl, the principal investigator, stated that, “The results demonstrate empirically that growth spurts not only occur during sleep but are significantly influenced by sleep.” Although the exact nature of the relationship between sleep and growth is unknown, Dr. Lampl notes that growth hormone is known to increase after the onset of sleep. She postulates that this change in hormonal signals during sleep could stimulate bone growth, which also supports reports from both children and their parents of night time awakenings from “growing pains,” or bones aching during the night.

Is there a connection between lack of sleep and diabetes?

Recent studies have demonstrated that inadequate sleep can cause insulin resistance. Insulin resistance is a condition that often precedes the onset of type 2 diabetes. This has led researchers to wonder how much the decrease in the average night’s sleep in western societies has to do with the almost epidemic rise in type 2 diabetes (*J. Clin. Endocrinol. Metab.* April 2010).

Parents can establish good sleep habits in their children by:

- Establishing a regular bedtime.
- Establishing a bedtime ritual, e.g., bathing, reading, lullaby, rocking.
- Keeping a regular routine during the day with scheduled meals, naps, and playtime.
- Never sending a child to bed with a bottle.
- Avoiding TV at bedtime and don’t have a TV in the bedroom.
- Keeping toys out of the bed or crib.
- Never sending a child to bed as a form of punishment.

For more information about sleep and sleep problems, visit:

- <http://www.sleepfoundation.org> (National Sleep Foundation)
- <http://www.aasmnet.org> (American Academy of Sleep Medicine)
- <http://www.nhlbi.nih.gov/about/ncsdr> (National Center on Sleep Disorders Research)



WIC, Nutrition Services Section
Department of State Health Services
P.O. Box 149347
Austin, TX 78714-9347

PERIODICALS

ADDRESS SERVICE REQUESTED

Publication No. 06-10664

Texas WIC News is now available on the Texas WIC Web site!
<http://www.dshs.state.tx.us/wichd/gi/wicnews.shtm>

next issue:

Trends in Child Feeding



For information about subscriptions to Texas WIC News, e-mail WICNewsSubscriptions@dshs.state.tx.us or call 1-512-341-4400, ext. 2258.